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## SEARCH REQUEST FORM

Scientific and Technical Information Center

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Requester's Full Name: Art Unit: 1/019 Phone N	Terman \ Number 308-4635	Examiner #: 7/4457 Date: 9/3001 Serial Number: 09/70/740	
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If more than one search is subm	itted, please prioriti	ze searches in order of need.	****
Please provide a detailed statement of the	search topic, and describe	as specifically as possible the subject matter to be searched	<b>i</b> .
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known. Please attach a copy of the cover s	•	eaning. Give examples or relevant citations, authors, etc, i d abstract.	1
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Inventors (please provide full names): _	Jucillad	11.0	<u>.:</u>
Earliest Priority Filing Date:	el 3/98		
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Ovco	<i>2000</i>	Jan Dalawal	
		Librarian-Physical Sciences	
·		CM1 1E01 Tel: 308-4498	
*****	*****	**********	
STAFF USE ONLY	Type of Search	Vendors and cost where applicable	
Searcher: 10m	NA Sequence (#)		_
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Searcher Location:	Structure (#)		
Date Searcher Picked Up:	Bibliographic	Dr.Link	

Litigation

Fulltext

Patent Family \_\_

Lexis/Nexis\_

Sequence Systems

WWW/Internet
Other (specify)\_

PTO-1590 (1-2000)

Date Completed:

Clerical Prep Time: \_

Online Time: \_\_\_\_

Searcher Prep & Review Time: \_

=> fil req FILE 'REGISTRY' ENTERED AT 12:27:28 ON 01 OCT 2001 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2001 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 30 SEP 2001 HIGHEST RN 359625-43-7 DICTIONARY FILE UPDATES: 30 SEP 2001 HIGHEST RN 359625-43-7

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search limits have been increased. See HELP SLIMIT for details.

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ANSWER 1 OF 17 REGISTRY COPYRIGHT 2001 ACS L92

RN 137766-94-0 REGISTRY

Benzoic acid, 3,4,5-trihydroxy-, (2S,3S)-3,4-dihydro-5,7-dihydroxy-2-CN (3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES:

Benzoic acid, 3,4,5-trihydroxy-, 3,4-dihydro-5,7-dihydroxy-2-(3,4,5trihydroxyphenyl)-2H-1-benzopyran-3-yl ester, (2S-cis)-

OTHER NAMES:

(+)-Epigallocatechin 3-gallate CN

CN (+)-Epigallocatechin gallate

FS STEREOSEARCH

MF C22 H18 O11

SR

BEILSTEIN\*, CA, CAPLUS, CHEMCATS, TOXLIT, USPATFULL LC (\*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (+).

Join O Point of Contact: Jan Dalaud Librarian-Physical Sciences

CM1 1E01 Tel: 308-4498

7 REFERENCES IN FILE CA (1967 TO DATE) 7 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:280620

REFERENCE 133:310854 2:

REFERENCE 3: 131:314196

REFERENCE 4: 131:120607

REFERENCE 5: 126:220714

REFERENCE 6: 126:84603

REFERENCE 7: 116:734

L'92 ANSWER 2 OF 17 REGISTRY COPYRIGHT 2001 ACS

RN 137425-07-1 REGISTRY

CN Benzoic acid, 3,4,5-trihydroxy-, 3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester, (2R-cis)-, mixt. with 3,5,7-trihydroxy-2-phenyl-4H-1-benzopyran-4-one (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES:

CN 4H-1-Benzopyran-4-one, 3,5,7-trihydroxy-2-phenyl-, mixt. contg. (9CI)

FS STEREOSEARCH

MF C22 H18 O11 . C15 H10 O5

CI MXS

SR CA

LC STN Files: CA, CAPLUS, TOXLIT

CM 1

CRN 989-51-5

CMF C22 H18 O11

Absolute stereochemistry. Rotation (-).

claim6

CM 2

CRN 548-83-4 CMF C15 H10 O5

## 1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:248130

L92 ANSWER 3 OF 17 REGISTRY COPYRIGHT 2001 ACS

RN 137425-06-0 REGISTRY

CN 4H-1-Benzopyran-4-one, 3,5,7-trihydroxy-2-phenyl-, mixt. with (2R-cis)-3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3,5,7-triol (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-, (2R-cis)-, mixt. contg. (9CI)

FS STEREOSEARCH

MF C15 H14 O7 . C15 H10 O5

CI MXS

SR CA

LC STN Files: CA, CAPLUS, TOXLIT

CM 1

CRN 970-74-1 CMF C15 H14 O7

Absolute stereochemistry.

CM 2

CRN 548-83-4 CMF C15 H10 O5

Join 1

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:248130

L92 ANSWER 4 OF 17 REGISTRY COPYRIGHT 2001 ACS

RN 136892-45-0 REGISTRY

CN 2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-, (2S,3S)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-, (2S-cis)-

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OTHER NAMES:
```

CN (+)-Epigallocatechin

FS STEREOSEARCH

MF C15 H14 O7

SR , CA

LC STN Files: BEILSTEIN\*, CA, CAPLUS, CHEMINFORMRX, TOXLIT, USPATFULL (\*File contains numerically searchable property data)

Absolute stereochemistry.

8 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

8 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 131:314196

REFERENCE 2: 131:120607

REFERENCE 3: 129:53769

REFERENCE 4: 126:220714

REFERENCE 5: 125:309011

REFERENCE 6: 118:21174

REFERENCE 7: 116:734

REFERENCE 8: 115:197710

L92 ANSWER 5 OF 17 REGISTRY COPYRIGHT 2001 ACS

RN **130405-40-2** REGISTRY

CN Benzoic acid, 3,4,5-trihydroxy-, (2S,3R)-2-(3,4-dihydroxyphenyl)-3,4-dihydro-5,7-dihydroxy-2H-1-benzopyran-3-yl ester (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES:

CN Benzoic acid, 3,4,5-trihydroxy-, 2-(3,4-dihydroxyphenyl)-3,4-dihydro-5,7-dihydroxy-2H-1-benzopyran-3-yl ester, (2S-trans)-

OTHER NAMES:

CN (-)-Catechin gallate

FS STEREOSEARCH

MF C22 H18 O10

SR CA

LC STN Files: BEILSTEIN\*, BIOSIS, CA, CAPLUS, CHEMCATS, CSCHEM, TOXLIT, USPATFULL

(\*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (-).

46 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

46 REFERENCES IN FILE CAPLUS (1967 TO DATE)

1: 135:210069 REFERENCE

REFERENCE 2: 135:194757

135:136564 REFERENCE 3:

135:121339 REFERENCE 4:

REFERENCE 5: 135:116766

6: REFERENCE 135:66050

REFERENCE 7: 134:336880

REFERENCE 8: 134:114963

9: 134:55660 REFERENCE

REFERENCE 10: 134:25362

ANSWER 6 OF 17 REGISTRY COPYRIGHT 2001 ACS L92

RN 101840-48-6 REGISTRY

CN Benzoic acid, 3,4,5-trihydroxy-, ester with (2R,3S)-2-(3,4dihydroxyphenyl)-3,4-dihydro-2H-1-benzopyran-3,5,7-triol (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

Benzoic acid, 3,4,5-trihydroxy-, ester with (2R-trans)-2-(3,4dihydroxyphenyl)-3,4-dihydro-2H-1-benzopyran-3,5,7-triol OTHER NAMES:

(+)-Catechin gallate CN

Catechin gallate CN

FS STEREOSEARCH

MF C15 H14 O6 . x C7 H6 O5

SR CA

STN Files: AGRICOLA, BIOBUSINESS, BIOSIS, CA, CAPLUS, NAPRALERT, TOXLIT LC

CM 1

CRN 154-23-4 CMF C15 H14 O6 Absolute stereochemistry. Rotation (+).

CM 2

CRN 149-91-7 CMF C7 H6 O5 Jacando

20 REFERENCES IN FILE CA (1967 TO DATE)

3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

20 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 134:331603

REFERENCE 2: 134:160076

REFERENCE 3: 133:27659

REFERENCE 4: 131:314196

REFERENCE 5: 131:120607

REFERENCE 6: 131:72842

REFERENCE 7: 129:242495

REFERENCE 8: 128:248554

REFERENCE 9: 125:299737

REFERENCE 10: 125:274251

L92 ANSWER 7 OF 17 REGISTRY COPYRIGHT 2001 ACS

RN **35323-91-2** REGISTRY

CN 2H-1-Benzopyran-3,5,7-triol, 2-(3,4-dihydroxyphenyl)-3,4-dihydro-, (2S,3S)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2H-1-Benzopyran-3,5,7-triol, 2-(3,4-dihydroxyphenyl)-3,4-dihydro-, (2S-cis)-

OTHER NAMES:

CN (+)-Epicatechin

CN (+)-Epicatechol

CN (2S, 3S) - (+) - Epicatechin

```
CN d-Epicatechin FS STEREOSEARCH
```

MF C15 H14 O6

CI COM

LC STN Files: AGRICOLA, BEILSTEIN\*, BIOSIS, CA, CAPLUS, CHEMCATS, CHEMINFORMRX, IFICDB, IFIPAT, IFIUDB, IPA, NAPRALERT, TOXLINE, TOXLIT, USPATFULL

(\*File contains numerically searchable property data)

Absolute stereochemistry.

72 REFERENCES IN FILE CA (1967 TO DATE)

2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

72 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:210286
REFERENCE 2: 135:194757
REFERENCE 3: 135:131718

REFERENCE 4: 135:121339

REFERENCE 5: 135:66050

REFERENCE 6: 134:236393

REFERENCE 7: 134:236383

REFERENCE 8: 134:231816

REFERENCE 9: 134:28801

REFERENCE 10: 134:25362

L92 ANSWER 8 OF 17 REGISTRY COPYRIGHT 2001 ACS

RN 18829-70-4 REGISTRY

CN 2H-1-Benzopyran-3,5,7-triol, 2-(3,4-dihydroxyphenyl)-3,4-dihydro-, (2S,3R)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2H-1-Benzopyran-3,5,7-triol, 2-(3,4-dihydroxyphenyl)-3,4-dihydro-, (2S-trans)-

CN Catechol, (-)- (8CI)

OTHER NAMES:

CN (-)-Catechin

CN (-)-Catechol

CN l-Catechin

CN L-Catechin

FS STEREOSEARCH

MF C15 H14 O6

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, CAPLUS, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, IFICDB,

IFIPAT, IFIUDB, MRCK\*, NAPRALERT, PROMT, TOXLINE, TOXLIT, USPATFULL
 (\*File contains numerically searchable property data)
Other Sources: EINECS\*\*
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry.

LC

STN Files:

90 REFERENCES IN FILE CA (1967 TO DATE) 3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 91 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 135:131718 REFERENCE 2: 135:121339 135:116766 REFERENCE 3: 135:66050 REFERENCE 4: 134:28801 REFERENCE 5: REFERENCE 134:25362 6: 7: 133:358971 REFERENCE REFERENCE 8: 133:234567 9: 133:192358 REFERENCE REFERENCE 10: 133:176459 L92 ANSWER 9 OF 17 REGISTRY COPYRIGHT 2001 ACS RN **5127-64-0** REGISTRY Benzoic acid, 3,4,5-trihydroxy-, (2R,3S)-3,4-dihydro-5,7-dihydroxy-2-CN (3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES: Benzoic acid, 3,4,5-trihydroxy-, 3,4-dihydro-5,7-dihydroxy-2-(3,4,5-CN trihydroxyphenyl)-2H-1-benzopyran-3-yl ester, (2R-trans)-CN Gallic acid, ester with gallocatechol CN Gallocatechol gallate (6CI) Gallocatechol, 3-gallate (7CI, 8CI) CN OTHER NAMES: CN (+)-Gallocatechol gallate CN 3-O-Galloyl-(+)-gallocatechin CN Gallocatechin gallate FS STEREOSEARCH DR 36291-30-2 MF C22 H18 O11 CI COM

AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA,

CAOLD, CAPLUS, DDFU, DRUGU, NAPRALERT, TOXLIT, USPATFULL (\*File contains numerically searchable property data)

Absolute stereochemistry: Rotation (+).

```
69 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
70 REFERENCES IN FILE CAPLUS (1967 TO DATE)
22 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

1: 135:216375
```

REFERENCE REFERENCE 2: 135:205163 REFERENCE 135:194757 3: REFERENCE 135:97422 4: REFERENCE 5: 135:73687 135:30553 REFERENCE 6: 134:366018 REFERENCE 7: REFERENCE 8: 134:331603 REFERENCE 134:325472 9:

L92 ANSWER 10 OF 17 REGISTRY COPYRIGHT 2001 ACS

134:261257

RN **4233-96-9** REGISTRY

10:

CN Benzoic acid, 3,4,5-trihydroxy-, (2S,3R)-3,4-dihydro-5,7-dihydroxy-2- (3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES:

CN Benzoic acid, 3,4,5-trihydroxy-, 3,4-dihydro-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester, (2S-trans)-

CN Gallic acid, ester with gallocatechol, (-)

CN Gallocatechol, 3-gallate, (-)- (8CI)

OTHER NAMES:

REFERENCE

CN (-)-Gallocatechin 3-O-gallate

CN (-)-Gallocatechin gallate

CN (-)-Gallocatechol gallate

CN NVP-XAA 225

FS STEREOSEARCH

MF C22 H18 O11

LC STN Files: ANABSTR, BEILSTEIN\*, BIOSIS, CA, CAOLD, CAPLUS, CHEMCATS, NAPRALERT, RTECS\*, TOXLIT, USPATFULL (\*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (-).

107 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

108 REFERENCES IN FILE CAPLUS (1967 TO DATE)

2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:207715

REFERENCE 2: 135:194582

REFERENCE 3: 135:166246

REFERENCÉ 4: 135:136564

REFERENCE 5: 135:121339

REFERENCE 6: 135:116766

REFERENCE 7: 135:97484

REFERENCE 8: 135:66050

REFERENCE 9: 135:4505

REFERENCE 10: 134:336880

L92 ANSWER 11 OF 17 REGISTRY COPYRIGHT 2001 ACS

RN **1257-08-5** REGISTRY

CN Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-2-(3,4-dihydroxyphenyl)-3,4-dihydro-5,7-dihydroxy-2H-1-benzopyran-3-yl ester (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:

CN Benzoic acid, 3,4,5-trihydroxy-, 2-(3,4-dihydroxyphenyl)-3,4-dihydro-5,7-dihydroxy-2H-1-benzopyran-3-yl ester, (2R-cis)-

CN Epicatechol, 3-gallate, (-)- (8CI)

CN Epicatechol, gallate (6CI)

CN Gallic acid, 3-ester with epicatechol, (-)- (8CI)

OTHER NAMES:

CN (-)-epi-Catechin 3-O-gallate

CN (-)-Epicatechin 3-gallate

.(-)-Epicatechin 3-O-gallate CN (-)-Epicatechol gallate CN 3-Galloyl-(-)-epicatechin 3-O-Galloyl-(-)-epicatechin CN CN .3-O-Galloylepicatechin epi-Catechin 3-O-gallate CN CN Epicatechin gallate CN Epicatechol 3-gallate CN L-Epicatechin gallate FS STEREOSEARCH C22 H18 O10 MF CI COM AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, LC STN Files: CAOLD, CAPLUS, CASREACT, CHEMCATS, CSCHEM, IPA, NAPRALERT, RTECS\*, TOXLINE, TOXLIT, USPATFULL (\*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (-).

CN

696 REFERENCES IN FILE CA (1967 TO DATE) 4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 698 REFERENCES IN FILE CAPLUS (1967 TO DATE) 44 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

135:210069 REFERENCE 1: 135:207715 REFERENCE 2: REFERENCE 3: 135:204892 REFERENCE 4: 135:200277 REFERENCE 5: 135:194757 REFERENCE 6: 135:194582 REFERENCE 7: 135:190373 REFERENCE 8: 135:189665 135:179849 REFERENCE 9: REFERENCE 10: 135:170556 L92 ANSWER 12 OF 17 REGISTRY COPYRIGHT 2001 ACS

RN 989-51-5 REGISTRY

```
. Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-3,4-dihydro-5,7-dihydroxy-2-
     (3,4,5-trihydroxyphenyl)-2H-1-benzopyran-3-yl ester (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Benzoic acid, 3,4,5-trihydroxy-, 3,4-dihydro-5,7-dihydroxy-2-(3,4,5-
     trihydroxyphenyl)-2H-1-benzopyran-3-yl ester, (2R-cis)-
CN
     Epigallocatechol, 3-gallate (7CI)
CN
     Epigallocatechol, 3-gallate, (-)- (8CI)
CN
     Epigallocatechol, gallate (6CI)
     Gallic acid, 3-ester with epigallocatechol, (-)- (8CI)
CN
OTHER NAMES:
     (-)-epi-Gallocatechin 3-O-gallate
CN
CN
     (-)-Epigallocatechin 3-gallate
CN
     (-)-Epigallocatechin 3-O-gallate
CN
     (-)-Epigallocatechin gallate
CN
     (-)-Epigallocatechol gallate
CN
     3-O-Galloyl-(-)-epigallocatechin
CN
     epi-Gallocatechin 3-0-gallate
CN
     Epigallocatechin 3-gallate
CN
     Epigallocatechin gallate
CN
     L-Epigallocatechin gallate
CN
     NVP-XAA 723
FS
     STEREOSEARCH
DR
     863-65-0
     C22 H18 O11
MF
CI
     COM
                  ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*,
LC
     STN Files:
       BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT,
       CBNB, CEN, CHEMCATS, CIN, CSCHEM, DDFU, DRUGU, EMBASE, IPA, MEDLINE,
       MRCK*, NAPRALERT, NIOSHTIC, PROMT, RTECS*, SYNTHLINE, TOXLINE, TOXLIT,
       USPATFULL
         (*File contains numerically searchable property data)
```

Absolute stereochemistry. Rotation (-).

1345 REFERENCES IN FILE CA (1967 TO DATE)
18 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1351 REFERENCES IN FILE CAPLUS (1967 TO DATE)
46 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:216375

REFERENCE 2: 135:210069

REFERENCE 3: 135:207519

REFERENCE 4: 135:205507

```
REFERENCE
            5:
                135:205163
REFERENCE
                135:204985
REFERENCE
            7:
                135:204919
                135:204892
REFERENCE
            8:
REFERENCE
            9:
                135:194940
REFERENCE
           10:
                135:194757
     ANSWER 13 OF 17 REGISTRY COPYRIGHT 2001 ACS
L92
RN
     970-74-1 REGISTRY
CN
     2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-,
                     (CA INDEX NAME)
     (2R, 3R) - (9CI)
OTHER CA INDEX NAMES:
     2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-,
     (2R-cis)-
     Epigallocatechol (8CI)
CN
OTHER NAMES:
     (-) -3,3',4',5,5',7-Flavanhexol
CN
     (-)-epi-Gallocatechin
CN
CN
     (-)-Epigallocatechin
CN
     (-)-Epigallocatechol
     1-epi-3', 4', 5', 5, 7-Pentahydroxy-3-flavanol
CN
CN
     3,3',4',5,5',7-Flavanhexol
CN
     Antiscurvy factor C2
CN
     epi-Gallocatechin
     Epigallocatechin
CN
     Factor C2 (antiscurvy)
CN
CN
     1-Epigallocatechin
CN
     L-Epigallocatechin
CN
     1-Epigallocatechol
FS
     STEREOSEARCH
     98032-84-9, 2545-09-7
DR
     C15 H14 O7
MF
CI
     COM
                  ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
LC
     STN Files:
       BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CSCHEM,
       DDFU, DRUGU, EMBASE, IPA, NAPRALERT, PROMT, RTECS*, TOXLINE, TOXLIT,
       USPATFULL
         (*File contains numerically searchable property data)
```

## Absolute stereochemistry.

1057 REFERENCES IN FILE CA (1967 TO DATE)
16 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1060 REFERENCES IN FILE CAPLUS (1967 TO DATE)
13 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

```
REFERENCE 1:
                135:210069
REFERENCE
            2:
                135:205507
REFERENCE
            3:
                135:204892
REFERENCE
                135:194940
            4:
REFERENCE
                135:194757
REFERENCE
                135:194582
REFERENCE
            7:
                135:189695
REFERENCE
                135:189665
REFERENCE
            9:
                135:179849
REFERENCE
           10:
                135:175356
     ANSWER 14 OF 17 REGISTRY COPYRIGHT 2001 ACS
L92
RN
     970-73-0 REGISTRY
     2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-,
CN
     (2R, 3S) - (9CI)
                     (CA INDEX NAME)
OTHER CA INDEX NAMES:
     2H-1-Benzopyran-3,5,7-triol, 3,4-dihydro-2-(3,4,5-trihydroxyphenyl)-,
     (2R-trans)-
CN
     Gallocatechol (8CI)
OTHER NAMES:
CN
     (+)-Gallocatechin
CN
     (+)-Gallocatechol
CN
     d-Gallocatechin
CN
     Gallocatechin
FS
     STEREOSEARCH
     13425-13-3, 528-54-1, 24987-87-9
DR
MF
     C15 H14 O7
CI
     COM
                  AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
LC
     STN Files:
       BIOTECHNO, CA, CAOLD, CAPLUS, CHEMCATS, CHEMINFORMRX, CSCHEM, DDFU,
       DRUGU, EMBASE, IPA, NAPRALERT, PIRA, TOXLINE, TOXLIT, USPATFULL
```

Absolute stereochemistry.

- 371 REFERENCES IN FILE CA (1967 TO DATE) 10 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 372 REFERENCES IN FILE CAPLUS (1967 TO DATE)

5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

(\*File contains numerically searchable property data)

REFERENCE 1: 135:194582

135:190373 REFERENCE 2: 135:140456 REFERENCE 3: 135:121514 REFERENCE 135:119578 REFERENCE 5: 135:116515 REFERENCE 6: REFERENCE 7: 135:102574 135:91861 REFERENCE REFERENCE 9: 134:366018 REFERENCE 10: 134:331603 ANSWER 15 OF 17 REGISTRY COPYRIGHT 2001 ACS L92 RN **863-03-6** REGISTRY Benzoic acid, 3,4,5-trihydroxy-, (2R,3R)-2-(3,4-dihydroxyphenyl)-3,4-CN dihydro-5,7-dihydroxy-2H-1-benzopyran-3-yl ester, rel- (9CI) (CA INDEX NAME) OTHER CA INDEX NAMES: Benzoic acid, 3,4,5-trihydroxy-, 2-(3,4-dihydroxyphenyl)-3,4-dihydro-5,7dihydroxy-2H-1-benzopyran-3-yl ester, cis-CN Epicatechol, 3-gallate (7CI) CN Gallic acid, 3-ester with epicatechol (8CI) OTHER NAMES: CN epi-Catechin 3-O-gallate CN Epicatechin gallate CN Epicatechol gallate FS STEREOSEARCH MF C22 H18 O10 N Files: AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAOLD, CAPLUS, CASREACT, DDFU, DRUGU, EMBASE, LC STN Files: MEDLINE, PROMT, TOXLINE, TOXLIT, USPATFULL

(\*File contains numerically searchable property data)

Relative stereochemistry.

286 REFERENCES IN FILE CA (1967 TO DATE)
4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
286 REFERENCES IN FILE CAPLUS (1967 TO DATE)
14 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

```
REFERENCE • 1:
                 135:216375
REFERENCE
             2:
                 135:194940
                 135:140456
REFERENCE
             3:
                 135:131661
REFERENCE
             4:
REFERENCE
             5:
                 135:117184
                 135:97484
REFERENCE
             6:
REFERENCE
             7:
                 135:97422
REFERENCE
             8:
                 135:91654
REFERENCE
             9:
                 135:86762
                 135:73687
REFERENCE 10:
L92 ANSWER 16 OF 17 REGISTRY COPYRIGHT 2001 ACS
RN
     490-46-0 REGISTRY
     2H-1-Benzopyran-3,5,7-triol, 2-(3,4-dihydroxyphenyl)-3,4-dihydro-,
CN
     (2R, 3R) - (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     2H-1-Benzopyran-3,5,7-triol, 2-(3,4-dihydroxyphenyl)-3,4-dihydro-,
     (2R-cis)-
     Epicatechol, (-)- (8CI)
CN
OTHER NAMES:
     (-) - (2R:3R) -5, 7, 3', 4'-Tetrahydroxyflavan-3-ol
CN
     (-)-Epicatechin
CN
     (-)-Epicatechol
CN
     (2R, 3R) - (-) - Epicatechin
CN
CN
     epi-Catechin
     epi-Catechol
CN
     Epicatechin
CN
CN
     Epicatechol
     1-Acacatechin
CN
     1-Epicatechin
CN
CN
     L-Epicatechin
CN
     1-Epicatechol
FS
     STEREOSEARCH
     2545-08-6
DR
     C15 H14 O6
MF
CI
     COM
                   ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
LC
     STN Files:
       BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CEN, CHEMCATS, CHEMINFORMRX,
       CHEMLIST, CSCHEM, DDFU, DRUGU, EMBASE, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, NAPRALERT, PIRA, PROMT, RTECS*, SPECINFO, TOXLINE, TOXLIT,
       USPATFULL
          (*File contains numerically searchable property data)
     Other Sources: EINECS**
          (**Enter CHEMLIST File for up-to-date regulatory information)
```

Absolute stereochemistry.

```
HO
                R
                R
                    OH
       OH
             2316 REFERENCES IN FILE CA (1967 TO DATE)
               53 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             2325 REFERENCES IN FILE CAPLUS (1967 TO DATE)
               11 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
REFERENCE
            1:
                 135:210470
REFERENCE
             2:
                 135:210250
REFERENCE
             3:
                 135:210069
REFERENCE
                 135:209937
REFERENCE
                 135:207715
REFERENCE
                 135:200277
REFERENCE
            7:
                 135:194963
REFERENCE
                 135:194940
REFERENCE
                 135:194619
                 135:194582
REFERENCE
           10:
L92
     ANSWER 17 OF 17 REGISTRY COPYRIGHT 2001 ACS
RN
     154-23-4 REGISTRY
     2H-1-Benzopyran-3,5,7-triol, 2-(3,4-dihydroxyphenyl)-3,4-dihydro-,
CN
     (2R, 3S) - (9CI)
                      (CA INDEX NAME)
OTHER CA INDEX NAMES:
     2H-1-Benzopyran-3,5,7-triol, 2-(3,4-dihydroxyphenyl)-3,4-dihydro-,
     (2R-trans)-
CN
     Catechol (8CI)
OTHER NAMES:
     (+)-(2R:3S)-5,7,3',4'-Tetrahydroxyflavan-3-ol
CN
CN
     (+)-3',4',5,7-Tetrahydroxy-2,3-trans-flavan-3-ol
CN
     (+)-Catechin
CN
     (+)-Catechol
CN
     (+)-Cianidanol
CN
     (+)-Cyanidan-3-ol
CN
     (+)-Cyanidanol
CN
     (+)-Cyanidanol-3
CN
     3-Cyanidanol, (+)-
CN
     Biocatechin
CN
     Catechin
CN
     Catechin (flavan)
CN
     Catechinic acid
CN
     Catechol (flavan)
CN
     Catechuic acid
CN
     Catergen
CN
     Cianidanol
CN
     Cyanidanol
```

CN

D-(+)-Catechin

```
d-Catechin
CN
CN
     D-Catechin
CN
     D-Catechol
CN
     trans-(+)-3,3',4',5,7-Flavanpentol
FS
    · STEREOSEARCH
     321-01-7, 16198-00-8, 4211-28-3, 5323-80-8, 159761-73-6
DR
MF
CI
                  ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
LC
     STN Files:
       BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,
       CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU,
       EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NAPRALERT,
       NIOSHTIC, PDLCOM*, PHAR, PIRA, PROMT, RTECS*, SPECINFO, TOXLINE, TOXLIT,
       USAN, USPATFULL, VETU
         (*File contains numerically searchable property data)
                      EINECS**, WHO
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

Absolute stereochemistry. Rotation (+).

3473 REFERENCES IN FILE CA (1967 TO DATE)
225 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3479 REFERENCES IN FILE CAPLUS (1967 TO DATE)
2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 135:210250 REFERENCE 2: 135:210069 REFERENCE 3: 135:209937 REFERENCE 4: 135:208176 135:207715 REFERENCE 5: REFERENCE 6: 135:204842 REFERENCE 7: 135:204574 REFERENCE 8: 135:201848 REFERENCE 9: 135:200277 REFERENCE 10: 135:194790

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FILE COVERS 1947 - 1 Oct 2001 VOL 135 ISS 15 FILE LAST UPDATED: 30 Sep 2001 (20010930/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

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=> d 191 all tot
```

ፐጥ

Cosmetics

exts. and ascorbic acid)

```
ANSWER 1 OF 19 HCAPLUS COPYRIGHT 2001 ACS
L91
AN
    2001:467999 HCAPLUS
     135:66050
DN
ΤI
     Skin preparations containing catechins or green
     tea extracts and ascorbic acid
     Schoenrock, Uwe; Rapp, Claudius; Steinke, Sigrid; Frauen,
IN
    Markus; Rode, Timo
    Beiersdorf A.-G., Germany
PA
    Ger. Offen., 12 pp.
SO
    CODEN: GWXXBX
DT
     Patent
LA
    German
    ICM A61K007-00
ICS A61K007-48; A61K035-78
IC
     62-4 (Essential Oils and Cosmetics)
     Section cross-reference(s): 63
FAN.CNT 1
                 KIND
                           DATE
                                         APPLICATION NO. DATE
    PATENT NO.
                    ----
     -----
                                         ______
                          20010628 DE 1999-19962369 19991223
    DE 19962369 A1
PΙ
    The invention concerns skin prepns. that contain catechins or
AB
    green tea exts. and ascorbic acid or its derivs. in
     order to increase storage stability. Thus an O/W cream contained
    wt./wt.%: glyceryl stearate 5.00; cetylalc. 5.00; iso-Pr palmitate 7.00;
    cyclomethicone 5.00; ascorbic acid 0.30; Camellia
     sinensis (green tea) ext. 0.30; sodium
    hydroxide (45%) 1.00; butylene glycol 3.00; Na2H2EDTA 0.20; ethanol 2.00;
    perfume, dyes, preservatives q.s.; water to 100.
    skin prepn green tea ext catechin ascorbate
ST
    deriv
TΤ
     Tea products
        (beverages, green; skin prepns. contg. catechines or
       green tea exts. and ascorbic acid)
TT
    Hair preparations
        (conditioners; skin prepns. contg. catechines or green
        tea exts. and ascorbic acid)
ΙT
     Cosmetics
        (creams; skin prepns. contg. catechines or green tea
       exts. and ascorbic acid)
```

(gels; skin prepns. contg. catechines or green tea

```
IT
    'Cosmetics
        (lotions; skin prepns. contg. catechines or green tea
        exts. and ascorbic acid)
   Camellia irrawadiensis
       Camellia japonica
       Camellia taliensis
     Stability
       Tea (Camellia sinensis)
       Tea (Camellia sinensis assamica)
     Theales
        (skin prepns. contg. catechines or green tea exts.
        and ascorbic acid)
ΙT
     143549-76-2, L-Ascorbyl acetate
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (ascorbyl acetate; skin prepns. contg. catechines or green
        tea exts. and ascorbic acid)
     50-81-7, L-Ascorbic acid, biological studies
                                                    137-66-6, Ascorbylpalmitate
     154-23-4, (+)-Catechin 490-46-0, (-)-
     Epicatechin 970-74-1, (-)-Epigallocatechin
     989-51-5, (-)-Epigallocatechin Gallate
     1257-08-5 4233-96-9, (-)-Gallocatechin
     Gallate 18829-70-4, (-)-Catechin
     35323-91-2, (+)-Epicatechin
                                  108910-78-7, Magnesium
     ascorbylphosphate 130405-40-2, (-)-Catechin
     Gallate
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (skin prepns. contg. catechines or green tea exts.
        and ascorbic acid)
RE.CNT
       13
ŘΕ
(1) Anon; JP 07025742 A HCAPLUS
(2) Anon; JP 08119849 A HCAPLUS
(3) Anon; JP 09309833 A HCAPLUS
(4) Anon; DE 19824727 A1 HCAPLUS
(5) Anon; DE 19827624 A1 HCAPLUS
(6) Anon; DE 19838918 A1 HCAPLUS
(7) Anon; US 5780086
(8) Anon; US 5962517 HCAPLUS
(9) Anon; US 5972999 HCAPLUS
(10) Anon; WO 9823152 A1 HCAPLUS
(11) Anon; WO 9913859 Al HCAPLUS
(12) Anon; JP 59227243 A 1985
(13) Anon; JP 59227244 A 1985
    ANSWER 2 OF 19 HCAPLUS COPYRIGHT 2001 ACS
L91
ΑN
     2000:577561 HCAPLUS
DN
     133:155144
ΤТ
     W/O type emulsion cosmetic composition
     Ha, Byung-jo; Kim, Young-dae; Lee, Choong-nam; Cho, Byung-ki; Park, Young
IN
     Pacific Co., Ltd., S. Korea
PA
SO
     Repub. Korea, No pp. given
     CODEN: KRXXFC
DT
     Patent
LA
     Korean
     ICM A61K007-48
IC
CC
     62-4 (Essential Oils and Cosmetics)
FAN.CNT 1
                      KIND DATE
                                           APPLICATION NO.
     PATENT NO.
                                                            DATE
     -----
                      ____
    KR 9602175 💚
                                           KR 1992-23485
PΙ
                      В1
                            19960213
                                                             19921207 <--
AB
     The cosmetic compn. contains milk, at least one effective component, which
     is selected from oil-sol. protein, water-sol. protein and water-sol.
     flavonoid, and 0.01-10 % polyethoxylated vitamin E, which is produced by
```

```
'addn.. of 2-10 mol ethylene oxide to natural or synthetic vitamin E, with
     respect to total wt. of the compn. Milk is pasteurized milk, powd. milk,
     or nonfat dry milk. Water-sol. protein is extd. from mammal's cryst.
   lens. Water-sol. flavonoid is flavonoid from green tea
     , particularly epigallocatechin gallate. W/O
     emulsion is baby oil, massage oil, bath oil, sunscreen oil, baby
     lotion, etc.
     cosmetic emulsion milk flavonoid ethoxylated vitamin E
     Milk
        (cosmetic emulsions contg. milk and proteins and flavonoids
        and ethoxylated vitamin E)
     Flavonoids
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (cosmetic emulsions contq. milk and proteins and flavonoids
        and ethoxylated vitamin E)
     Cosmetics
        (emulsions; cosmetic emulsions contq. milk and
        proteins and flavonoids and ethoxylated vitamin E)
     Proteins, general, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (from mammal's cryst. lenses; cosmetic emulsions contq. milk
        and proteins and flavonoids and ethoxylated vitamin E)
     Tea products
        (green, exts.; cosmetic emulsions contq. milk and
        proteins and flavonoids and ethoxylated vitamin E)
        (lens, proteins from; cosmetic emulsions contg. milk and
        proteins and flavonoids and ethoxylated vitamin E)
     989-51-5, Epigallocatechin gallate
     1406-18-4D, Vitamin E, ethoxylated derivs.
                                                 74707-11-2D, derivs.
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (cosmetic emulsions contg. milk and proteins and flavonoids
        and ethoxylated vitamin E)
    ANSWER 3 OF 19 HCAPLUS COPYRIGHT 2001 ACS
L91
     2000:547325 HCAPLUS
     133:155131
     Oxidative hair dye composition containing green tea
     polyphenols
     Matravers, Peter; Milius, Ulrich; Cornuelle, Tracy L.
     Aveda Corporation, USA
     U.S., 5 pp.
     CODEN: USXXAM
     Patent
     English
     ICM A61K007-13
NCL
     008408000
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO.
                                                            DATE
     ______
                      ____
                            _____
                                           _____
                                                            _____
                                           ÙS 1998-15461
    US 6099591
                      A'
                            20000808
                                                            19980129 <--
     MARPAT 133:155131
```

ST

IT

ΙT

IT

IT

ΙT

IT

IT

ΑN DN

ΤI

IN PΑ

SO

DT

LA

IC

CC

PΙ OS

GI

Ahair coloring compn., and a method for using the compn. in which a natural plant-derived chem. of the formula I is employed as a coupler-modifier in a compn. contg. a primary intermediate and a customary coupler. The novel coupler-modifiers produce a compn. which is more physiol. suitable for use in hair colorings than the prior art compns. and allows for the prepn. of compns. which produce highly stable colorings over a broad range shades and tones. A hair coloring soln. contained green tea polyphenols 1.0, p-aminophenol 1.6, resorcinol 1.6, 50% sodium hydroxide 1.2, anhyd. sodium sulfite 0.4, ammonium lauryl sulfate (28% aq. soln.) 10.0, ethanol 10.0, 26% ammonia 10.0 and water 64.2 g. Shortly before application 10 g of this hair coloring compn. is mixed with 10 mL hydrogen peroxide soln. (6%), and the mixt. is allowed to react for 30 min at 30.degree. in blond human hair. The hair is then rinsed with water and dried to obtain a light olive coloration.

ST oxidative hair dye green tea polyphenol

IT Tea products

(beverages, green; oxidative hair dye compn. contg.

green tea polyphenols)

IT Hair preparations

(creams; oxidative hair dye compn. contq. green

Ι

tea polyphenols)

IT Hair preparations

(dyes, oxidative; oxidative hair dye compn. contg. green

tea polyphenols)

IT Coupling agents

(oxidative hair dye compn. contg. green tea

polyphenols)

IT Phenols, biological studies

RL: BOC (Biological occurrence); BUU (Biological use, unclassified); BIOL (Biological study); OCCU (Occurrence); USES (Uses)

(polyphenols, nonpolymeric; oxidative hair dye compn. contg.

green tea polyphenols)

95-70-5, 2,5-Diaminotoluene 106-50-3, 1,4-Diaminobenzene, biological studies 116-85-8, DISPERSE RED 15 123-30-8, p-Aminophenol 128-95-0, 1,4-Diamino-anthraquinone. 490-46-0, Epicatechin.

863-03-6, Epicatechin gallate 970-74-1

, Epigallocatechin 989-51-5, Epigallocatechin

gallate 2475-45-8, 1,4,5,8-Tetraaminoanthraquinone 2835-95-2,
5-Amino-2-methylphenol 2835-99-6, 3-Methyl-4-amino-phenol 5307-14-2,
2-Nitro 1,4-diaminobenzene 7722-84-1, Hydrogen peroxide, biological
studies 26381-41-9 68123-13-7, C.I. 56059 68391-30-0 68391-31-1
73793-80-3, 2,5-Diaminobenzyl alcohol

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye compn. contg. green tea polyphenols)

RE.CNT 7

RE

- (1) Anon; EP 124393 1994 HCAPLUS
- (2) Anon; JP 09263522 1997 HCAPLUS
- (3) Ehara; US 5131912 1992 HCAPLUS
- (4) Iwabuchi; US 4517175 1985
- (5) Lion Corp; JP 09263522 1997 HCAPLUS

```
(6) Parent; US 4013404 1977 HCAPLUS
(7) Venkataraman; The Chemistry of Synthetic Dyes 1971, V5, P478
L91 ANSWER 4 OF 19 HCAPLUS COPYRIGHT 2001 ACS
AN
    2000:388871 HCAPLUS
DN
     133:22185
     Anti-allergy and anti-inflammatory catechins from tea
ΤI
     extracts
     Tsuji, Akimitsu; Yamamoto, Mari; Kawahara, Kouji; Sano, Mitsuaki; Miyase,
IN
     Norinsuisansho Yasai Chagyo Shikenjocho, Japan; Seibutsu Kei Tokutei
PA
     Sangyo Gijutsu Kenkyu Suishin Kiko; Shizuoka Prefecture
SO
     Jpn. Kokai Tokkyo Koho, 8 pp.
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
IC
     ICM A61K031-353
     ICS A61K007-50; A61P029-00; A61P037-08; A61K035-78
CC
     62-4 (Essential Oils and Cosmetics)
     Section cross-reference(s): 17, 63
FAN.CNT 1
     PATENT NO.
                                          APPLICATION NO. DATE
                    KIND DATE
                                          ______
PΙ
     JP 2000159670
                     A2 20000613
                                          JP 1998-346646 19981120 <--
AΒ
     This invention relates to antiallergy and antiinflammatory agents
     comprising 3-0-methylgalloylepigallocatechin (I) and/or
     4-0-methylgalloylepigallocatechin (II). The agents can be administered
     topically or orally. I and II were isolated from polyphenol fractions of
     MeOH exts. of tea leaves. Candies, chewing gums, and bath
     prepns. contg. the invention compds \( \) were formulated.
ST
     antiallergy antiinflammatory epigallocatechin tea ext
ΙT
     Allergy inhibitors
     Anti-inflammatory agents
       Bath preparations
     Candy
     Chewing gum
       Tea (Camellia sinensis)
        (anti-allergy and anti-inflammatory catechins from
        tea exts.)
ΙT
    Drug delivery systems
        (topical; anti-allergy and anti-inflammatory catechins from
        tea exts.)
     83104-87-4
                 224434-07-5
TΤ
     RL: BAC (Biological activity or effector, except adverse); BOC (Biological
     occurrence); BUU (Biological use, unclassified); FFD (Food or feed use);
     BIOL (Biological study); OCCU (Occurrence); USES (Uses)
        (anti-allergy and anti-inflammatory catechins from
        tea exts.)
    ANSWER 5 OF 19 HCAPLUS COPYRIGHT 2001 ACS 1999:811549 HCAPLUS
L91
ΑN
DN
     Use of cosmetic preparations containing catechins or
TI
     green tea extracts for tanning of the skin.
ΤN
     Schoenrock, Uwe; Maxt, Heiner
     Beiersdorf A.-G., Germany
PΑ
SO
     Ger. Offen., 14 pp.
     CODEN: GWXXBX
DT
     Patent
LA
     German
IC
     ICM A61K007-42
CC
     62-4 (Essential Oils and Cosmetics)
FAN.CNT 1
                                          APPLICATION NO. DATE
     PATENT NO.
                     KIND DATE
     -----
                     ____
                                          -----
```

ΡI

DE 19827624

A1 19991223

DE 1998-19827624 19980620 <--

```
₩O 9966897
                       Α1
                            19991229
                                           WO 1999-EP4146
                                                             19990616 <--
         W; JP, US
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE
                                           EP 1999-929230
                                                             19990616 <--
    EP 1089707
                       Α1
                            20010411
         R: DE, ES, FR, GB, IT, SE
PRAI DE 1998-19827624 A
                            19980620
     WO 1999-EP4146
                       W
                            19990616
AΒ
     Suntanning prepns. contg. catechins or green
     tea exts. are described which also protect the skin against UV
     radiation. Thus, a lotion contained paraffin oil 20.00,
     petrolatum 4.00, glucose sesquiisostearate 2.00, aluminum stearate 0.40,
     .alpha.-Glucosylrutin 0.30; .alpha.-tocopheryl acetate 1.00 glycerin 5.00,
     preservative, dye and perfume qs, epigallocatechin
     gallate 0.50, and water to 100% by et.
ST
     suntanning agent catechin green tea ext
IT
     Cosmetics
       Sunburn
       Sunscreens
       Suntanning agents
        (cosmetic prepns. contg. catechins or green
        tea exts. for tanning of skin)
ΙT
     Tea (Camellia sinensis)
        (exts.; cosmetic prepns. contg. catechins or green
        tea exts. for tanning of skin)
     Phenols, biological studies
IT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (polyphenols, nonpolymeric; cosmetic prepns. contg. catechins
        or green tea exts. for tanning of skin)
IT
     58-08-2, Caffeine, biological studies
                                             149-91-7D, Gallic acid, esters
     154-23-4, (+)-Catechin 490-46-0, (-)-
     EpiCatechin 970-74-1, (-)-EpiGalloCatechin
     989-51-5, Epigallocatechin gallate
     1257-08-5 4233-96-9, (-)-GalloCatechin
     gallate 18829-70-4, (-)-Catechin
     35323-91-2, (+)-EpiCatechin 130405-40-2, (-)-
     Catechin gallate
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (cosmetic prepns. contg. catechins or green
        tea exts. for tanning of skin)
RE.CNT
RE
(1) Anon; JP 09194493 A HCAPLUS
(2) Anon; US 4981485 HCAPLUS
(3) Anon; 1968 HCAPLUS
(4) Anon; 1997 HCAPLUS
(5) Anon; 1997 HCAPLUS
     ANSWER 6 OF 19 HCAPLUS COPYRIGHT 2001 ACS
L91
ΑN
     1999:783898 HCAPLUS
DN
     132:26670
     Cosmetic or dermatologic preparations containing catechins or
TТ
     green tea extract .
IN
     Schreiner, Volker; Schoenrock, Uwe; Staeb,
     Franz; Max, Heiner; Sandhoff, Konrad;
     Doering, Thomas
     Beiersdorf A.-G., Germany
PA
SO
     PCT Int. Appl., 27 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     German
     ICM A61K007-48
ΙÇ
CC
     62-4 (Essential Oils and Cosmetics)
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Section cross-reference(s): 63

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FAN.CNT 1.
                                           APPLICATION NO. DATE
                      KIND DATE
     PATENT NO.
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                      ____
                           _____
                                           -----
                                           WO 1999-EP3777
                                                            19990601 <--
PI . WO 9962478
                            19991209
                      A1
        W: JP, US
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE
                                           DE 1998-19824727 19980603 <--
                            19991209
     DE 19824727
                       A1
                                           EP 1999-926491 19990601 <--
                            20010314
     EP 1082100
                       Α1
         R: DE, ES, FR, GB, IT, SE
PRAI DE 1998-19824727 A
                            19980603
     WO 1999-EP3777
                      W
                            19990601
     Catechins, gallic acid esters of catechins, or aq. or
AΒ
     org. exts. from plants or plant parts which contain catechins or
     gallic acid esters of catechins [e.g. leaves of Theaceae
     and esp. of Camellia sinensis (green
     tea)] or typical constituents thereof (e.g. polyphenols,
     catechins, caffeine, vitamins, sugar, minerals, amino acids,
     lipids) are useful for the prophylaxis, treatment, and/or care of dry skin
     conditions. These exts. and constituents markedly stimulate the formation
     of ceramides and sphingolipids in the skin and reinforce the lipid
     barrier. Thus, a water-in-oil skin cream contained Vaseline
     13.0, glycerin 6.30, paraffin oil 40.80, Eutanol G (cetostearyl alc. +
     ethoxylated castor oil + Na cetostearyl sulfate) 2.50, green
     tea ext. 3.00, perfume, preservative, dye, and H2O to 100.00 wt.%.
ST
     dry skin treatment tea catechin; gallate
     catechin dry skin treatment
ΙT
     Tea products
        (cosmetic or dermatol. prepns. contg. catechins or
        green tea ext.)
IT
     Amino acids, biological studies
     Carbohydrates, biological studies
     Flavanols
     Lipids, biological studies
     Mineral elements, biological studies
     RL: BAC (Biological activity or effector, except adverse); BUU (Biological
     use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (cosmetic or dermatol. prepns. contg. catechins or
        green tea ext.)
TΤ
     Sphingolipids
     RL: BPR (Biological process); MFM (Metabolic fórmation); BIOL (Biological
     study); FORM (Formation, nonpreparative); PROC (Process)
        (cosmetic or dermatol. prepns. contg. catechins or
        green tea ext.)
TΤ
     Skin, disease
        (dry; cosmetic or dermatol. prepns. contg. catechins or
        green tea ext.)
TΤ
     Leaf
     Plant (Embryophyta)
       Tea (Camellia sinensis)
       Theaceae
        (exts.; cosmetic or dermatol. prepns. contg. catechins or
        green tea ext.)
IΤ
     Cosmetics
        (moisturizers; cosmetic or dermatol. prepns. contg. catechins
        or green tea ext.)
TT
     Phenols, biological studies
     RL: BAC (Biological activity or effector, except adverse); BUU (Biological
     use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (polyphenols, nonpolymeric; cosmetic or dermatol. prepns. contg.
        catechins or green tea ext.)
     58-08-2, Caffeine, biological studies
                                             149-91-7D, Gallic acid, esters
TT
     with flavanols 154-23-4, (+)-Catechin 490-46-0
```

```
', (-)-Epicatechin 970-74-1, (-)-
    Epigallocatechin 989-51-5, (-)-Epigallocatechin
    gallate 1257-08-5 4233-96-9, (-)-
    Gallocatechin gallate 18829-70-4, (-)-
     Catechin 35323-91-2, (+)-Epicatechin
     130405-40-2, (-)-Catechin gallate
     RL: BAC (Biological activity or effector, except adverse); BUU (Biological
     use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (cosmetic or dermatol. prepns. contg. catechins or
        green tea ext.)
RE.CNT
RF.
(1) E-L Management Corporation; WO 9810739 A 1998 HCAPLUS
(2) E-L Management Corporation; WO 9810739 A 1998 HCAPLUS
(3) Vitasyn GMBH Entwicklung & Vertrieb Pharmazeutischer Produkte; DE 19627344
    A 1998 HCAPLUS
(4) Vitasyn GMBH Entwicklung & Vertrieb Pharmazeutischer Produkte; DE 19627344
    A 1998 HCAPLUS
    ANSWER 7 OF 19 HCAPLUS COPYRIGHT 2001 ACS
L91
     1999:449010 HCAPLUS
AN
DN
     131:120607
TΙ
     Light and heat-stable compositions containing tea polyphenols
     Takagaki, Akiko; Mori, Masao; Fukai, Katsuhiko; Nanjo, Fumio; Hara,
ΙN
PA
     Mitsui Norin Co., Ltd., Japan
     Jpn. Kokai Tokkyo Koho, 8 pp.
SO
     CODEN: JKXXAF
DT
     Patent
     Japanese
LA
     ICM A61K007-075
IC
     ICS A61K007-50; C11D001-74; C11D003-382; A61K007-16
     62-4 (Essential Oils and Cosmetics)
CC
     Section cross-reference(s): 11
FAN.CNT 1
                           DATE
     PATENT NO.
                     KIND
                                          APPLICATION NO. DATE
     _____
                      ____
                           _____
                                          -----
PΙ
     JP 11193221
                     A2
                            19990721
                                          JP 1997-366875
                                                            19971226 <--
OS
     MARPAT 131:120607
AΒ
     Light- and heat-stable compns. [e.g. shampoos] contain tea
     polyphenols selected from [+]-catechin, [-]-catechin,
     [+]-gallocatechin, [+]-epicatechin, [+]-gallocathechin gallate,
     [+]-epigallocatechin gallate, [-]-epicatechin
     , [-]-epicatechin gallate, [-]-catechin
     gallate, [-]-epigallocatechin, [-]-gallocatechin, [-]-
     epigallocatechin gallate, [-]-gallocatechin
     gallate, theaflavin monogallate A, theaflavin monogallate B,
     theaflavin digallate and theaflavin. A shampoo contained Polyphenone 60
     [contg. 60 % polyphenols ] 0.1, phasphanol ML-220 5, sodium benzoate 0.1
     and other ingredients and purified water to 100 wt./wt. %.
ST
     shampoo tea polyphenol stability
ΙT
     Shampoos
        (light- and heat-stable compns. contg. tea polyphenols)
IT
     Flavonoids
     RL: BUU (Biological use, unclassified); PEP (Physical, engineering or
     chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
        (light- and heat-stable compns. contg. tea polyphenols)
IT
     Phenols, biological studies
     RL: BUU (Biological use, unclassified); PEP (Physical, engineering or
     chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
        (polyphenols, nonpolymeric, tea; light- and heat-stable
        compns. contg. tea polyphenols)
     120-80-9, [-]-Catechin, biological studies 154-23-4,
IT
     [+]-Catechin 490-46-0, [-]-Epicatechin
```

863-03-6, [-]-Epicatechin gallate

```
970-73-0, [+]-Gallocatechin 970-74-1, [-]-
    Epigallocatechin 989-51-5, [-]-Epigallocatechin
    gallate 4233-96-9, (-)-Gallocatechin
              4670-05-7, Theaflavin 5127-64-0
                                                28543-07-9,
    Theaflavin monogallate B 30462-34-1, Theaflavin monogallate A
     33377-72-9, Theaflavin digallate 101840-48-6, Catechin
    gallate 136892-45-0, (+)-Epigallocatechin
    137766-94-0, (+)-Epigallocatechin\gallate
    RL: BUU (Biological use, unclassified); PEP (Physical, engineering or
     chemical process); BIOL (Biological\study); PROC (Process); USES (Uses)
        (light- and heat-stable compns. contg. tea polyphenols)
    ANSWER 8 OF 19 HCAPLUS COPYRIGHT 2001 ACS
L91
ΑN
    1999:331518 HCAPLUS
DN
    131:20578
TI
    Catechin-containing soaps
ΤN
    Takada, Ayako
    Amure\K. K., Japan
PA
SO
     Jpn. Kokai Tokkyo Koho, 3 pp.
    CODEN: JKXXAF
DT
    Patent
LA
    Japanese
IC
    ICM C11D009-26
     ICS C11D009<sup>2</sup>50
     46-2 (Surface Active Agents and Detergents)
CC
     Section cross-reference(s): 1, 62, 63
FAN.CNT 1
    PATENT NO.
                    KIND DATE
                                          APPLICATION NO. DATE
                          -----
                                          -----
     -----
                     A2 19990525 JP 1997-316287 19971031 <--
    JP 11140497
PΙ
    Soaps contg. catechins derived from green tea
AΒ
    have bactericidal and deodorizing properties. Thus, 17.7% coconut oil and
     65.8% tallow were heated, sapond. with 14.0% NaOH, and salted-out with
     2.0% NaCl to give a neat soap, which was mixed with 0.5% catechin
     , aged in a mold, and cut to give a product showing good effect such as
    prevention of acne, atopic dermatitis, body smell, etc.
    catechin blend soap antibacterial; deodorizing soap
ST
    catechin blend; atopic dermatitis soap catechin blend
ΙT
    Dermatitis
        (atopic; catechin-contg. soaps having bactericidal and
       deodorizing properties)
IT
    Acne
    Antibacterial agents
        (catechin-contq. soaps having bactericidal and deodorizing
       properties)
ΙT
    RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (catechin-contg. soaps having bactericidal and deodorizing
       properties)
IT
     Flavanols
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (catechin-contg. soaps having bactericidal and deodorizing
       properties)
IT
     Cosmetics
        (cleansing; catechin-contg. soaps having bactericidal and
       deodorizing properties)
IT
     Fatty acids, preparation
     RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (coco, sodium salts; catechin-contg. soaps having
       bactericidal and deodorizing properties)
```

```
Fatty acids, preparation
TΤ
     RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
   . (Uses)
        (tallow, sodium salts; catechin-contq. soaps having
        bactericidal and deodorizing properties)
L91
     ANSWER 9 OF 19 HCAPLUS COPYRIGHT 2001 ACS
     1998:51822 HCAPLUS
ΑN
DN
     128:97452
    Anti-inflammatory effect of oolong tea polyphenols
ΤI
     Nakazato, Kenichi; Takeo, Tadakazu
ΑU
     Cent. Res. Inst., Ito-en Ltd., Shizuoka, 421-05, Japan
CS
     Nippon Nogei Kagaku Kaishi (1998), 72(1), 51-54
SO
     CODEN: NNKKAA; ISSN: 0002-1407
PΒ
     Nippon Nogei Kagakkai
\mathsf{D}\mathbf{T}
     Journal
     Japanese
T.A
CC
     1-7 (Pharmacology)
     The anti-inflammatory activity of aq. oolong tea ext. was
AB
     tested. The formation of edema caused in rats paws by injection of
     carrageenin was effectively depressed by soaking the rat paws in hot
     oolong tea ext. It gives 60% inhibition at the dose of 75 ppm
     of oolong tea ext. Oolong tea ext. showed higher
     antiinflammatory activity than those of green and black
     tea exts. The active components were found to be
     catechins and oolong tea tannin (oxidative products of
     catechin in oolong tea) fractionated from aq. oolong
     tea ext. By oral administration of oolong tea ext.,
     carrageenin-induced inflammation was also inhibited, but the
     anti-inflammatory activity by oral administration was lower than by the
     soaking treatment. The inflammatory activity of percutaneous absorbed
     oolong tea polyphenols was assumed to be due, at least partly,
     to the inhibition of prostaglandin biosynthesis in rat tissue injected
     with carrageenin.
ST
     oolong tea ext antiinflammatory catechin tannin
ΙT
     Anti-inflammatory drugs
        (anti-inflammatory effect of oolong tea polyphenols)
TΤ
     Phenols, biological studies
     Polyphenols (nonpolymeric)
     Tannins
     RL: BAC (Biological activity or effector, except adverse); BOC (Biological
     occurrence); BIOL (Biological study); OCCU (Occurrence)
        (anti-inflammatory effect of oolong tea polyphenols)
ΙT
     Skin diseases
        (edema; anti-inflammatory effect of oolong tea polyphenols)
ΙT
     Tea products
        (leaves, oolong, exts.; anti-inflammatory effect of oolong tea
        polyphenols)
ΙT
     Edema
        (skin; anti-inflammatory effect of oolong tea polyphenols)
ΙT
     490-46-0, Epicatechin 863-03-6,
     Epicatechin gallate 970-74-1,
     Epigallocatechin 989-51-5, Epigallocatechin
     gallate
     RL: BAC (Biological activity or effector, except adverse); BOC (Biological
     occurrence); BIOL (Biological study); OCCU (Occurrence)
        (anti-inflammatory effect of oolong tea polyphenols)
     ANSWER 10 OF 19 HCAPLUS COPYRIGHT 2001 ACS
L91
ΑN
     1996:656422 HCAPLUS
DN
     125:284345
     Hair growth inhibitors comprising a catechin compound
ΤI
ΙN
     Ahluwalia, Gurpreet S.
PA
     Handelman, Joseph H., USA
SO
     PCT Int. Appl., 17 pp.
```

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CODEN: PIXXD2
DT.
     Patent
LA
     English
IC
     ICM A61K007-06
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                             DATE
                            19960906
                                            WO 1996-US2791
                                                             19960227 <--
ΡI
    WO 9626705
                       Α1
             AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,
             ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT,
             LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
             SG, SI
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE,
             IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML
     US 5674477
                            19971007
                                            US 1995-396426
                                                             19950228 <--
                       Α
     CA 2213411
                       AA
                            19960906
                                            CA 1996-2213411
                                                            19960227 <--
     AU 9651781
                            19960918
                                            AU 1996-51781
                                                             19960227 <--
                       Α1
     AU 720440
                       B2
                            20000601
                       Α1
                            19980107
                                            EP 1996-908589
                                                             19960227 <--
     EP 814754
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT,
     BR 9607061
                            19981215
                                            BR 1996-7061
                                                             19960227 <--
                       Α
                       Т2
                            19990126
                                            JP 1996-526416
                                                             19960227 <--
     JP 11501036
     ZA 9601599
                       Α
                            19960905
                                            ZA 1996-1599
                                                             19960228 <--
    US 5776442/
                            19980707
                                            US 1997-893319
                                                             19970716 <--
                       Α
PRAI US 1995-396426
                            19950228
                                       <--
                       Α
                       W
                            19960227
                                      <--
     WO 1996-US2791
     Mammalian hair growth is reduced by applying to the skin a dermatol.
AB
     acceptable compn. including a catechin compd. A mixt. of
     catechins extd. from tea leaves contained
     epigallocatechin 4.6, epigallocatechin gallate
     69.6, epicatechin 6.7, and epicatechin gallate
     19.1%. Daily application of the mixt. in a vehicle comprising water 68,
     ethanol 16, propylene glycol 5, dipropylene glycol 5, benzyl alc. 4, and
     propylene carbonate 2% to hamster skin, decreased the hair growth by 91%
     after 13 application.
ST
     hair growth inhibitor catechin tea leave
ΙT
     Hirsutism
        (hair growth inhibitors comprising a catechin compd.)
ΙT
     Tannins
     RL: BOC (Biological occurrence); BUU (Biological use, unclassified); BIOL
     (Biological study); OCCU (Occurrence); USES (Uses)
        (hair growth inhibitors comprising a catechin compd.)
ΙΤ
     Hair preparations
        (growth inhibitors, hair growth inhibitors comprising a
        catechin compd.)
     Tea products
IT
        (leaves, hair growth inhibitors comprising a catechin compd.)
ΙT
    (154-23-4D, Catechin, oligomers and oxidative dimers
     490-46-0, Epicatechin 863-03-6,
     Epicatechin gallate 970-74-1,
     Epigallocatechin 989-51-5, Epigallocatechin
     gallate
     RL: BOC (Biological occurrence); BUU (Biological use, unclassified); BIOL
     (Biological study); OCCU (Occurrence); USES (Uses)
        (hair growth inhibitors comprising a catechin compd.)
ΙT
     970-73-0, Gallocatechin
                              2545-00-8, Afzelechin
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair growth inhibitors comprising a catechin compd.)
     ANSWER 11 OF 19 HCAPLUS COPYRIGHT 2001 ACS
L91
     1996:264974 HCAPLUS
AN
DN
     124:298912
     Woolong tea extracts containing tannins for treatment of
ΤI
     steroid-induced skin diseases
```

```
Asthma
     Environment
       Pharmaceutical dosage forms
       Tea products
        (prepn. of antiallergen formulations for removal of environmental
        allergens)
ΙT
     Allergens
     RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
        (prepn. of antiallergen formulations for removal of environmental
        allergens)
ΙT
    Dermatitis
        (allergic, prepn. of antiallergen formulations for removal of
        environmental allergens)
                                                 149-91-7D, Gallic acid, alc.
ΙT
     149-91-7, Gallic acid, biological studies
     esters 490-46-0, Epicatechin 863-03-6,
     Epicatechin gallate 970-74-1,
     Epigallocatechin 989-51-5, Epigallocatechin
               1306-06-5, Hydroxyapatite
     RL: BAC (Biological activity or effector, except adverse); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (prepn. of antiallergen formulations for removal of environmental
        allergens)
    ANSWER 14 OF 19 HCAPLUS COPYRIGHT 2001 ACS
L91
    1994:417750 HCAPLUS
ΑN
DN
     121:17750
     Tyrosinase inhibitors for cosmetics
TI
ΙN
     Hara, Masahiko; Pponda, Yoshikazu
PΑ
     Mitsui Norin Kk, Japan
SO
     Jpn. Kokai Tokkyo Koho, 3 pp.
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
IC
     ICM A61K035-78
     ICS A61K007-00; A61K031-35
ICA
    C07D311-62
     62-4 (Essential Oils and Cosmetics)
CC
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO. DATE
     -----
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                           _____
                                           -----
   •JP 06065085
                           19940308
                                                            19920821 <--
PI
                      A2
                                           JP 1992-244001
    Tyrosinase inhibitors, useful for skin-lightening prepns., contain
     tea polyphenols as active ingredients. Epicatechin
     gallate and epigallocatechin gallate strongly
     inhibited tyrosinase.
     cosmetic tyrosinase inhibitor polyphenol tea; skin lightening
ST
     tyrosinase inhibitor polyphenol
ΙT
     Melanins
     RL: FORM (Formation, nonpreparative)
        (formation of, inhibition of, by polyphenols of tea, as
        tyrosinase inhibitors)
ΙT
     Tea (Camellia sinensis)
        (polyphenols of, as tyrosinase inhibitors, for skin lightening prepns.)
     Phenols, biological studies
IT
     RL: PREP (Preparation)
        (polyhydric, of tea, as tyrosinase inhibitors, for skin
        lightening prepns.)
ΙT
     Cosmetics
        (skin-lightening, contg. polyphenols, of tea, as tyrosinase
        inhibitors)
     9002-10-2, Tyrosinase
IT
     RL: BIOL (Biological study)
        (inhibitors for, polyphenols as, of tea, for skin lightening
        prepns.)
     490-46-0, Epicatechin 863-03-6,
TΤ
     Epicatechin gallate 970-74-1,
```

```
'Nakazato, Kenichi; Takeo, Chuichi; Kawasaki, Toshio; Fukui, Yasuhiko;
    Fukui, Kazuhiko
PΑ
    Itoen Kk, Japan
  Jpn. Kokai Tokkyo Koho, 4 pp.
SO
    CODEN: JKXXAF
DT
    Patent
LA
    Japanese
IC
    ICM A61K035-78
ICA
    C07G017-00
     63-4 (Pharmaceuticals)
    Section cross-reference(s): 1, 11, 62
FAN.CNT 1
                                         APPLICATION NO. DATE
    PATENT NO.
                   KIND DATE
                                          -----
    ______
                           19960109 JP 1994-134675 19940616 <--
    JP 08003053 A2
PΤ
    Woolong tannins extd. from oolong tea, semifermented oolong
    tea , or fermented oolong tea are useful for the
    treatment of skin diseases complicated by steroid treatment. The tannins
    comprise flavan-3-ol compds. such as catechin,
    epicatechin, epicatechin gallate, and
    epigallocatechin gallate. The tannin exts. can be
    incorporated into bath prepns. Effectiveness was clin. tested.
ST
    oolong tea tannin steroid skin disease
ΙT
    RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (oolong tea exts. contg. tannins for treatment of
       steroid-induced skin diseases)
IT
    Tea products
        (oolong; oolong tea exts. contg. tannins for treatment of
       steroid-induced skin diseases)
IT
    Skin, disease
        (steroid-induced; oolong tea exts. contg. tannins for
       treatment of steroid-induced skin diseases)
ΙT
    Steroids, biological studies
    RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (steroid-induced; oolong tea exts. contg. tannins for
       treatment of steroid-induced skin diseases)
    120-80-9P, Catechin, biological studies 490-46-0P,
TΤ
    Epicatechin 863-03-6P, Epicatechin
    gallate 989-51-5P, Epigallocatechin
             1481-83-0P, Flavan-3-ol
    gallate
    RL: PUR (Purification or recovery); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (oolong tea exts. contg. tannins for treatment of
       steroid-induced skin diseases)
    ANSWER 12 OF 19 HCAPLUS COPYRIGHT 2001 ACS
L91
    1995:610763 HCAPLUS
ΑN
    123:17499
DN
    Extracting flavonoids and catechins from mate tea
TΙ
    leaves for use as antioxidants and active agents in cosmetics
    Kurose, Senshiro; Matsumura, Takashi
ΙN
    ENB - Extratos Naturais do Brasil Ind. e Com. S/A, Brazil
PA
SO
    Braz. Pedido PI, 18 pp.
    CODEN: BPXXDX
DT
    Patent
LA
    Portuguese
    ICM A61K007-48
TC
    ICS A61K031-35; C07G013-00
     62-4 (Essential Oils and Cosmetics)
CC
    Section cross-reference(s): 63
FAN.CNT 1
                  KIND DATE
    PATENT NO.
                                          APPLICATION NO. DATE
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19950301
                                         BR 1993-3217
                                                           19930730 <--
PI.
    BR 9303217
AΒ
    Catechins and polymd. catechins can be extd. from the
    flavonoids present in the leaves of mate tea (Ilex
   .paraguariensis) which are suitable for use as antioxidants and physiol.
    active agents in cosmetics. Aq. exts. of mate contain mainly
    catechin with secondary amts. of epigallocatechin,
    gallocatechin, and epicatechin. Ethanolic exts. of mate contain
    mainly epigallocatechin, with secondary amts. of gallocatechin,
    catechin, and epicatechin. Among the activities these
    compds. may have in cosmetic formulations are antioxidant, improvement of
    circulation, UV interception, tyrosinase inhibition, astringent,
    anti-inflammatory, skin-softening, skin-moisturizing, emollient, and
    bacteriostatic.
    cosmetic antioxidant catechin mate ext
ST
IT
    Antioxidants
      Cosmetics
    Leaf
    Mate
        (extg. flavonoids and catechins from mate tea
       leaves for use as antioxidants and active agents in cosmetics)
IT
    Flavanols
    Phenols, biological studies
    Tannins
    RL: BUU (Biological use, unclassified); PUR (Purification or recovery);
    THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (extg. flavonoids and catechins from mate tea
       leaves for use as antioxidants and active agents in cosmetics)
    154-23-4P, Catechin 490-46-0P,
TT
    Epicatechin 577-85-5P, Flavonol 970-73-0P,
    Gallocatechin 970-74-1P, Epigallocatechin
    RL: BUU (Biological use, unclassified); PUR (Purification or recovery);
    THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (extg. flavonoids and catechins from mate tea
       leaves for use as antioxidants and active agents in cosmetics)
    ANSWER 13 OF 19 HCAPLUS COPYRIGHT 2001 ACS
L91
    1995:267327 HCAPLUS
ΑN
DN
    122:38824
    Preparation of antiallergen formulations for removal of environmental
ΤI
    Miura, Takao; Yoshikawa, Ayumi; Hironaka, Yutaka
ΙN
    Earth Chemical Co, Japan
PA
    Jpn. Kokai Tokkyo Koho, 10 pp.
SO
    CODEN: JKXXAF
DT
    Patent
LA
    Japanese
IC
    ICM A61K031-19
    ICS A61K031-235; A61K031-35; A61K031-70; A61K033-42; A61K035-78
     63-5 (Pharmaceuticals)
    Section cross-reference(s): 1
FAN.CNT 1
                                   APPLICATION NO. DATE
    PATENT NO.
                    KIND DATE
                                          _____
     ______
                           19941004
                                          JP 1993-108704 19930330 <--
PΙ
    JP 06279273
                      Α2
    The antiallergen formulations for removal of environmental allergens are
AΒ
    prepd. by 0.1-10 wt. % tea exts, hydroxyapatite,
    epicatechin, epigallocatechin, epicatechin
    gallate, epigallocatechin gallate, gallic acid
    and esters of gallic acid and alcs.(C1-4). The formulations, including
    liqs. sprays, emulsions, powders, granules, etc., are effective
     to remove environmental allergens e.g. from pollens, Dermatophagoides
    species, etc., which cause allergic dermatitis and asthma in children.
ST
    antiallergen formulation environmental allergen dermatitis asthma
TT
    Allergy inhibitors
```

ΑN DN

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ΙT

ΑN DN

TΙ

IN PΑ

SO

DT

LA

IC

PATENT NO.

KIND DATE

```
Epigallocatechin 989-51-5, Epigallocatechin
    gallate
    RL: BIOL (Biological study)
        (tyrosinase inhibitor, for skin lightening prepns.)
L91 ANSWER 15 OF 19 HCAPLUS COPYRIGHT 2001 ACS
    1992:136230 HCAPLUS
    116:136230
     Polyphenols of tea extracts for treatment of skin disorders
    caused by Trichophyton
     Shimamura, Tadakatsu
    Mitsui Norin Co., Ltd., Japan
    Jpn. Kokai Tokkyo Koho, 4 pp.
    CODEN: JKXXAF
    Patent
    Japanese
    ICM A61K035-78
    ICS A61K031-35
     63-4 (Pharmaceuticals)
    Section cross-reference(s): 5, 11
FAN.CNT 1
    PATENT NO.
                     KIND DATE
                                          APPLICATION NO.
                                                          DATE
     _____
                     ----
                                          -----
    JP 03255033
                      A2
                           19911113
                                          JP 1990-47205
                                                           19900301 <--
    JP 3019996
                     В2
                           20000315
    US 5135957
                     Α
                           19920804
                                          US 1990-533463
                                                           19900605 <--
    CA 2018388
                     AA
                           19910901
                                          CA 1990-2018388 19900606 <--
    AU 9056827
                     A1
                           19910905
                                          AU 1990-56827
                                                           19900606 <--
    AU 617252
                      В2
                           19911121
PRAI JP 1990-47205
                     Α
                           19900301 <--
    A pharmaceutical for treatment of skin disorders (e.g. Athlete's foot)
     caused by Trichophyton contains a tea ext. having polyphenols as
     active agents. The polyphenols include catechins and isomers.
     Thus, Ceylon tea was extd. with a phosphate buffer, and the
     inhibitory activity of the ext. on T. mentagrophytes was demonstrated in
     tea polyphenol skin Trichophyton
     Tea products
        (exts. of, polyphenols as, for Trichophyton infection control)
     Trichophyton mentagrophytes
     Trichophyton rubrum
        (skin infection with, polyphenols of tea ext. effect on)
     Skin, disease
        (infection, from Trichophyton, tea ext. for treatment of)
     989-51-5, Epigallocatechin gallate
     137893-14-2
    RL: BIOL (Biological study)
        (Trichophyton infection control by)
L91
    ANSWER 16 OF 19 HCAPLUS COPYRIGHT 2001 ACS
    1991:648130 HCAPLUS
    115:248130
     Flavonoids for protection of cells against chemically active species of
     oxygen, their extraction from plants, and their use in cosmetics
     Park, Soo Nam; Boo, Yong Chool
     Pacific Chemical Co., Ltd., S. Korea
     Fr. Demande, 17 pp.
    CODEN: FRXXBL
     Patent
    French
    ICM A61K035-78
    ICS A61K031-35
     1-12 (Pharmacology)
     Section cross-reference(s): 11, 62, 63
FAN.CNT 1
```

APPLICATION NO. DATE

```
._____ -_----
    FR 2651132 A1 19910301
FR 2651132 B1 19930108
KR 9707186 B1 19970507
JP 03093782 A2 19910418
JP 07103025 B4 19951108
                                             FR 1990-935
                                                              19900126 <--
Ρľ
                                             KR 1989-12435 19890820 <--
                                             JP 1990-16320 19900129 <--
PRAI KR 1989-12435
                      Α
                             19890830 <--
     KR 1989-12492 A
KR 1989-12493 A
                             19890831 <--
                             19890831 <--
     Flavonoids are extd. from plants for use as agents to protect cells
AB
     against chem. active species of O. Cosmetic compns. contain these
     protective agents. (-)-Epigallocatechin gallate (I)
     was prepd. by extn. from dry leaves of Camellia sinensis
        Galangin was extd. from dry alpinia officinarum Hance roots. In a
     photohemolysis assay, a 1:1 mixt. of I and galangin gave a half-hemolysis
     time of >2000 min (compared with 32 min for controls). Each, alone, gave
     values of 400 and 1800, resp.
ST
     cell protection oxygen flavonoid plant; cosmetic flavonoid cell protection
     oxygen; epigallocatechin gallate Camellia cell oxygen;
     galangin Alpinia cell protection oxygen
IT
     Scutellaria baicalensis
        (baicalein of root of, for protection of cells against chem. active
        forms of oxygen)
ΙT
     Flavonoids
     RL: BIOL (Biological study)
        (cells protection with, from chem. active forms of oxygen)
ΙT
     Cosmetics
        (contg. plant flavonoids for protection of cells against chem. active
        forms of oxygen)
     Tea (Camellia sinensis)
ΙT
        (epigallocatechin gallate of, for protection of
        cells against chem. active forms of oxygen)
IT
     Leaf
        (epigallocatechin gallate of, of Camellia
        sinensis, for protection of cells against chem. active forms of
        oxygen)
     Citrus tangerina
ΙT
     Tanaka
        (flavonoid of fruit rind of, for protection of cells against chem.
        active species of oxygen)
     Acacia catechu
ΙT
     Ginkgo biloba
        (flavonoid of leaves of, for protection of cells against chem. active
        species of oxygen)
ΙT
     Alpinia officinarum
        (galangin of root of, for protection of cells against chem. active
        forms of oxygen)
TΥ
     Root
        (galangin of, of Alpinia officinarum, for protection of cells against
        chem. active forms of oxygen)
ΙT
     Cell
        (protection of, against chem. active forms of oxygen, plant flavonoids
        for)
IT
     Plant tissue
        (rind, flavonoid of, of Citrus tangerina, for protection of cells
        against chem. active species of oxygen)
                           548-83-4, Galangin 989-51-5
IT
     491-67-8, Baicalein
     137425-06-0 137425-07-1
     RL: BIOL (Biological study)
         (cells protection with, from chem. active forms of oxygen)
     117-39-5, Quercetin 153-18-4, Rutin 154-23-4, (+)-

Catechin 480-16-0, Morin 480-18-2, Taxifolin 480-20-6,
ΙT
     Aromadendrin
                   480-40-0, Chrysin 480-44-4, Acacetin 490-46-0,
                                               520-36-5, Apigenin
     (-)-Epicatechin 520-18-3, Kaempferol
                                               529-44-2, Myricetin
     525-82-6, Flavone 528-48-3, Fisetin
                                                                      577-85-5,
     3-Hydroxyflavone 604-59-1, 7,8-Benzoflavone 4382-33-6,
```

```
'Dihydrorobinetin
                       21967-41-9, Baicalin
                                              22888-70-6, Silybin
    RL: BIOL (Biological study)
        (chem. active oxygen species effect on cells response to)
IT .7782-44-7D, Oxygen, chem.-active forms
    RL: BIOL (Biological study)
        (flavonoids from plants for protection of cells against)
    ANSWER 17 OF 19 HCAPLUS COPYRIGHT 2001 ACS
L91
    1989:211301 HCAPLUS
ΑN
    110:211301
DN
    Antioxidant compositions containing aliphatic hydroxycarboxylic acids and
ΤI
     tea extracts for foods, cosmetics, and pharmaceuticals
IN
    Iwai, Yoshio; Sano, Takafumi; Kashimata, Misao; Kaneoka, Mitsuo
PΑ
    Sankyo Co., Ltd., Japan; Fuji Seito Co., Ltd.
SO
    Jpn. Kokai Tokkyo Koho, 5 pp.
    CODEN: JKXXAF
DT
    Patent
    Japanese
LA
IC
     ICM C09K015-34
     ICS A23L003-34; C09K015-06
     17-6 (Food and Feed Chemistry)
    Section cross-reference(s): 62, 63
FAN.CNT 1
    PATENT NO.
                    KIND DATE
                                          APPLICATION NO. DATE
     ______
                                          -----
                                                          _____
                   A2
                                          JP 1986-280986 19861126 <--
    JP 63135484
                           19880607
PΙ
    JP 03055518
                    B4 19910823
AB
    An antioxidant compn. comprising tea exts. and .gtoreq.1 aliph.
    hydroxycarboxylic acids for foods, cosmetics, and pharmaceuticals is
    described. Waste tea leaves 30 kg were extd. with MeOH, and the
    MeOH ext. was distd., concd., and dried under reduced pressure to obtain
     4.5 kg water-sol. tea ext. The tea ext. with the
    addn. of aliph. polyvalent carboxylic acids gave a peroxide value of 30-54
    meguiv/kg compared to a control of 76-150 meguiv/kg.
    antioxidant food pharmaceutical; carboxylic acid hydroxy tea ext
ST
    antioxidant
IT
    Tea products
        (exts., antioxidant compn. contg. hydroxy carboxylic acid and)
ΙT
    Antioxidants
        (tea exts. and aliph. polyvalent hydroxy carboxylic acids in)
    Carboxylic acids, biological studies
IΤ
    RL: BIOL (Biological study)
        (aliph., hydroxy, antioxidant compn. contg. tea ext. and,
       enhancement in relation to)
    77-92-9, Citric acid, biological studies 87-69-4, Tartaric acid,
ΙT
                         6915-15-7, Malic acid
    biological studies
    RL: BIOL (Biological study)
        (antioxidant compn. contg. tea exts. and, enhanced activity
       in relation to)
                                                 58-08-2, Caffeine, biological
IT
    50-81-7, Ascorbic acid, biological studies
     studies 863-03-6, Epicatechin gallate
    970-74-1, Epigallocatechin 989-51-5,
    Epigallocatechin gallate
    RL: BIOL (Biological study)
        (antioxidant compns. contg. tea ext. and, aliph.
       hydroxycarboxylate in relation to)
    ANSWER 18 OF 19 HCAPLUS COPYRIGHT 2001 ACS
1.91
AN
    1985:137589 HCAPLUS
DN
     102:137589
ΤI
    Cosmetics containing catechin compounds
PA
    Osaka Yakuhin Kenkyusho K. K., Japan
SO
     Jpn. Kokai Tokkyo Koho, 5 pp.
     CODEN: JKXXAF
DT
     Patent
```

LA

Japanese

```
ΙÇ
    'ICM A61K007-00
     ICS A61K035-78; C11D003-20
ICA A61K031-35
CC , 62-4 (Essential Oils and Cosmetics)
FAN.CNT 1
                    KIND DATE
                                          APPLICATION NO. DATE
    PATENT NO.
                                          -----
                     ----
     _____
                                                          -----
                 A2 19841206
B4 19930319
                                          JP 1983-91934 19830524 <--
     JP 59216810
PΙ
     JP 05020405
     Cosmetics contain catechin [154-23-4] and
AΒ
     epigallocatechin [970-74-1] which are antioxidants and
     used as preservatives. A tannin fraction contg. catechin
     derivs. is isolated from dried leaves of Uncaria gambir. A skin
     lotion comprises glycerin 5, propylene glycol 4, oleyl alc. 0.1,
     emulsifier 2, EtOH 10, perfume 0.2, the tannin ext. 0.05, and H2O
     to 100% by wt.
    catechin compd cosmetic; tannin catechin cosmetic;
ST
     antioxidant catechin cosmetic
ΙT
     Cosmetics
        (antioxidants for, catechin derivs. as)
IT
     Antioxidants
        (catechin derivs., cosmetics contg.)
IT
     Tannins
     RL: BIOL (Biological study)
        (of Uncaria gambir, as antioxidants, cosmetics contg.)
ΙT
     Uncaria gambier
        (tannins of, as antioxidants, cosmetics contg.)
     154-23-4 490-46-0 863-03-6 970-74-1
ΙT
     RL: BIOL (Biological study)
        (cosmetics contg., as antioxidant)
    ANSWER 19 OF 19 HCAPLUS COPYRIGHT 2001 ACS
L91
     1984:437394 HCAPLUS
ΑN
DN
     101:37394
ΤI
     Tea extracts as antioxidants
PΑ
     Zaidan Hojin Kyaiku Bunka Kenkyusho, Japan
SO
     Jpn. Kokai Tokkyo Koho, 4 pp.
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
    C09K015-08; A23L003-34; A61K007-00; A61K035-78
ΙC
     17-6 (Food and Feed Chemistry)
     Section cross-reference(s): 62, 63
FAN.CNT 1
     PATENT NO.
                 KIND DATE
                                          APPLICATION NO. DATE
     ______
                           -----
PΙ
     JP 59045385 A2 19840314
                                          JP 1982-157648 19820909 <--
AΒ
     A tea ext. fraction contg. mainly epicatechin [
     490-46-0], epigallocatechin [970-74-1],
     epicatechin gallate [863-03-6], and(or)
     epigallocatechin gallate [989-51-5] is an
     antioxidant for foods, medicines, and cosmetics.
ST
     tea ext antioxidant compn
ΙT
     Cosmetics
     Food
       Pharmaceuticals
        (antioxidants from tea exts. for)
ΙT
       (ext., antioxidant compds. of, uses of)
ΙT
     Antioxidants
        (of tea ext., uses of)
     490-46-0 863-03-6 970-74-1 989-51-5
     RL: BIOL (Biological study)
        (of tea ext., antioxidant properties and uses of)
```

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    SEE http://www.derwent.com/covcodes.html <<<
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L112 ANSWER 1 OF 3 WPIX
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ΑN
     2001-433940 [47]
                        WPIX
DNC
    C2001-131365
ΤI
     Composition of ascorbyl compound and catechin, or extract
     containing it, useful for improving barrier properties of skin.
DC
     B05 D21 E19
     FRAUEN, M; RAPP, C; RODE, T; SCHOENROCK, U; STEINKE, S
IN
PA
     (BEIE) BEIERSDORF AG
CYC
                   A1 20010628 (200147)*
                                                     A61K007-00
PΙ
     DE 19962369
                                              11p
    DE 19962369 A1 DE 1999-19962369 19991223
ADT
PRAI DE 1999-19962369 19991223
IC
     ICM A61K007-00
     ICS A61K007-48; A61K035-78
AB
     DE 19962369 A UPAB: 20010822
     NOVELTY - Active ingredient composition (A) comprises (i) an extract of a
     plant of the order Theales and/or catechins (I) and/or (I)
     gallate esters and (ii) at least one ascorbyl compound (II), preferably
     water soluble.
          DETAILED DESCRIPTION - The extract is particularly derived from a
     plant of the family Theaceae, especially the tea plants Camellia sinensis,
     C. assamica, C. taliensis, C. irrawadiensis or their hybrids with e.g. C.
     japonica.
          ACTIVITY - Dermatological.
          MECHANISM OF ACTION - (A) improves, or restores, the barrier function
     and hydration of the stratum corneum, in particular the physico-chemical
     properties of the lamellae of intracellular lipids.
          USE - (A) is used in cosmetic and dermatological compositions,
     particularly those in which (i) is a catechin-containing plant
     extract (specifically of green tea). The compositions are used for care
     and protection of the skin, especially sensitive, dry, aged or otherwise
     altered skin, e.g. protection against toxic and allergic reactions, sun,
     wind, ageing etc.
          ADVANTAGE - (II) act as stabilizers for (I), which normally have very
     poor storage stability. (A) improves, or restores, the barrier function
     and hydration of the stratum corneum, in particular the physico-chemical
     properties of the lamellae of intracellular lipids.
     Dwg.0/0
FS
     CPI
FA
     AB; DCN
     CPI: B03-F; B04-A08; B04-A10; B06-A01; B10-C03; B14-G02A; B14-N17;
          B14-R01; D08-B09A; E06-A01; E07-A02B
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UPTX: 20010822

TECH

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TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred materials: (I) are (+) or
     (-) forms of catechin or epicatechin, or (-)-
     epigallocatechin, all optionally as their gallates. (I) is
    particularly Vitamin C or its derivative, e.g. ascorbyl acetate or
     palmitate, or magnesium ascorbyl phosphate. Preferred compositions: These
     contain 0.0001-20, best 0.01-1, wt.% (i) and 0.001-10, best 0.1-2, wt.%
     (I). The compositions may also include usual sunscreens, preservatives,
     surfactants, antioxidants etc., and may be formulated as solutions,
     emulsions, gels, etc. or in transdermal therapeutic systems.
L112 ANSWER 2 OF 3 WPIX
                           COPYRIGHT 2001
                                            DERWENT INFORMATION LTD
     2000-073760 [07]
                        WPIX
    C2000-021393
     Use of catechols or plant extracts containing them in intensifying natural
     skin tanning or in stimulating melanogenesis.
     D21 D22 E13
    MAXT, H; SCHOENROCK, U; MAX, H
     (BEIE) BEIERSDORF AG
    20
     DE 19827624
                   A1 19991223 (200007)*
                                              13p
                                                     A61K007-42
                   A1 19991229 (200008) DE
                                                     A61K007-42
     WO 9966897
        RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
         W: JP US
                                                     A61K007-42
     EP 1089707
                   A1 20010411 (200121) DE
         R: DE ES FR GB IT SE
     DE 19827624 A1 DE 1998-19827624 19980620; WO 9966897 A1 WO 1999-EP4146
     19990616; EP 1089707 A1 EP 1999-929230 19990616, WO 1999-EP4146 19990616
    EP 1089707 Al Based on WO 9966897
PRAI DE 1998-19827624 19980620
     ICM A61K007-42
     ICS A61K007-48
     DE 19827624 A UPAB: 20000209
     NOVELTY - Use is claimed in intensifying natural tanning of the human skin
     or in stimulating melanogenesis of catechols or gallic acid esters of
     catechols (or of aqueous or organic extracts containing such materials),
     preferably Theaceae (and especially Camellia sinensis (green tea)) leaves
     or their typical constituents such as polyphenols, catechols, caffein,
     vitamins, sugars, minerals, amino acids or lipids.
          USE - In cosmetics or dermatological compositions, the
     catechol-containing plant extract being green tea.
          ADVANTAGE - These tanning compositions also impart protection of the
     skin against UV. They also avoid the formaldehyde generation associated
     with the use of dihydroxyacetone.
     Dwg.0/0
     CPI
     AB; DCN
     CPI: D08-B09A; D09-E; E06-A01; E10-E02D
L112 ANSWER 3 OF 3 WPIX
                           COPYRIGHT 2001
                                            DERWENT INFORMATION LTD
     2000-063503 [06]
                       WPIX
    C2000-017829
     Use of catechin compounds, e.g. in green tea extract, in
     cosmetic and dermatological preparations, especially for application to
     dry skin.
     B02 B04 D21 E13
     DOERING, T; MAX, H; SANDHOFF, K;
     SCHOENROCK, U; SCHREINER, V; STAEB, F
     (BEIE) BEIERSDORF AG
    20
                   A1 19991209 (200006)*
     DE 19824727
                                              10p
                                                     A61K007-48
                   A1 19991209 (200006) DE
     WO 9962478.
                                                     A61K007-48
        RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
         W: JP US
                                                     A61K007-48
     EP 1082100
                   A1 20010314 (200116) DE
         R: DE ES FR GB IT SE
    DE 19824727 A1 DE 1998-19824727 19980603; WO 9962478 A1 WO 1999-EP3777
```

ΑN DNC

ΤI

DC

ΙN

PA

PΙ

ADT

FDT

IC

AB

FS

FA

MC

ΑN

ΤI

DC

IN

PΑ CYC

PΙ

ADT

DNC

CYC

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19990601; EP 1082100 A1 EP 1999-926491 19990601, WO 1999-EP3777 19990601
     EP 1082100 Al Based on WO 9962478
PRAI DE 1998-19824727 19980603
  · ICM A61K007-48
     ICS A61K035-78
     DE 19824727 A UPAB: 20000209
AB
     NOVELTY - Catechins and their cholanic acid (literally: bile
     acid) esters as well as plant extracts containing them are used to
     prevent, treat and care for dry skin and to improve skin condition by
     stimulating sphingolipid synthesis or strengthening the lipid barrier.
          DETAILED DESCRIPTION - Use of catechins and their cholanic
     acid (literally: bile acid) esters, including aqueous and organic plant
     extracts containing them, e.g. from leaves of Theaceae, especially
     Camellia sinensis (green tea), or their typical components, e.g.
     polyphenols, catechins, caffeine, vitamins, sugars, minerals,
     amino acids, lipids), for: (a) the prevention, treatment and/or care of
     dry skin or (b) the stimulation of the sphingolipid synthesis in or the
     strengthening of the lipid barrier of human skin is new.
          USE - In cosmetic and dermatological skin preparations.
          ADVANTAGE - The catechin compounds and their extracts are
     cheaper and more effective than conventionally used intercellular lipid
     mixtures, especially ceramides. Also, they are physiologically acceptable
     and have a rapid and long-lasting action.
     Dwq.0/0
     CPI
FS
FA
     AB; DCN
     CPI: B01-D01; B03-L; B04-A06; B04-A08C2; B04-A09A; B04-A10B; B04-B01B;
MC
          B04-D01; B06-A01; B10-B02; B14-N17; D08-B09A; E06-A01; E10-B02
TECH
                    UPTX: 20000203
     TECHNOLOGY FOCUS - PHARMACEUTICALS - Preferred Catechins: The
     catechin is (+)- or (-)-catechin, (-)-catechin
     gallate, (-)-gallocatechin gallate, (+)- or
     (-)-epicatechin,(-)-epicatechin gallate,
     (-)-epigallocatechin or (-)-epigallocatechin
     gallate.
=> d his
     (FILE 'HOME' ENTERED AT 11:17:18 ON 01 OCT 2001)
                SET COST OFF
     FILE 'REGISTRY' ENTERED AT 11:17:27 ON 01 OCT 2001
                E (-)-CATECHIN/CN
L1
              1 S E3
                E (+)-CATECHIN/CN
                E "(+)-CATECHIN"/CN
              1 S E3
L2
                E (-)-CATECHIN GALLATE/CN
L3
              1 S E3
                E (-)-GALLOCATECHIN GALLATE/CN
L4
                E "(+)-EPICHATECHIN"/CN
                E "(+)-EPICATECHIN"/CN
L_5
              1 S E3
                E "(-)-EPICATECHIN"/CN
L6
              1 S E3
                E "(-)-EPICATECHIN GALLATE"/CN
                E "(-)-EPICATECHIN"/CN
L7
              1 S E7
                E (-)-EPIGALLOCATECHIN/CN
              1 S E3
\Gamma8
L9
              1 S E12
                E C15H14O6/MF
             67 S E3 AND OC5-C6/ES AND 46.150.18/RID AND 3/NR
L10
L11
             23 S L10 AND 3 4 AND 3 5 7
```

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11 S L11 NOT (11C# OR 13C# OR 14C# OR C11# OR C13# OR C14# OR LABE
L1.2
              7 S L12 AND 2 3 4 DIHYDROXYPHENYL
L13
                E C22H18O10/MF
             21 S E3 AND 46.150.18/RID AND 4/NR
L14 .
L15
             10 S L14 AND 3 YL
L16
              7 S L15 AND 2 3 4 DIHYDROXYPHENYL
                E C22H18O11/MF
             19 S E3 AND OC5-C6/ES AND 46.150.18/RID AND 4/NR
L17
             12 S L17 AND BENZOIC NOT (D OR T)/ELS
L18
              7 S L18 AND 3 YL
L19
                E C15H14O7/MF
             11 S E3 AND OC5-C6/ES AND 46.150.18/RID AND 3/NR AND 3 5 7 TRIOL
L20
L21
              7 S L20 NOT (D OR T)/ELS
             28 S L1-L9, L13, L16, L19, L21
L22
                SAV TEMP L22 ALYSIA701/A
                SEL RN
L23
            121 S E1-E28/CRN
     FILE 'HCAOLD' ENTERED AT 11:38:09 ON 01 OCT 2001
             99 S L22
L24
L25
              6 S L23
L26
            105 S L24, L25
                SEL AN
                EDIT /AN /OREF
     FILE 'HCAPLUS' ENTERED AT 11:39:24 ON 01 OCT 2001
L27
            193 S E29-E133
                E THEA/CW
L28
             60 S E3,E4,E5
                E TEA/CW
L29
           8657 S E3
                E CAMELLIA/CW
L30
           1609 S E3,E4
                E EINENSIS/CW
                E SINENSIS/CW
           2730 S E3
L31
                E CAMELLIA/CT
                E E34+ALL
                E E2+ALL
L32
           4188 S E7+NT
                E E6+ALL
L33
           4311 S E6+NT
             58 S L27 AND (TEA OR GREENTEA OR BLACKTEA OR THEA OR THEACEAE OR C
L34
             18 S L27 AND (GREEN OR BLACK) (L) TEA
L35
L36
             58 S L34, L35
              2 S L27 AND (SKIN OR DERMAT? OR EPIDERM? OR COSMETIC OR PROPHYLA?
L37
              2 S L36 AND (COSMETIC# OR PHARMACEUT? OR PHARMACOL?)/SC,SX
L38
              2 S L27 AND ANTISEPT?
L39
           5247 S L22
L40
L41
            167 S L23
           5298 S L40, L41
L42
           6956 S CATECHIN OR CATECHIN GALLATE OR GALLOCATECHIN GALLATE OR EPIC
L43
L44
           7867 S L42, L43
                E SCHREINER V/AU
             33 S E3, E4, E6, E7
L45
                E SCHONROCK U/AU
              6 S E4
L46
                E SCHOENROCK U/AU
L47
             48 S E3-E5
                E STAB F/AU
              5 S E3, E4
L48
                E STAEB F/AU
             39 S E3-E5
L49
                E MAX H/AU
             37 S E3-E5
L50
                E DORING T/AU
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L51
              4 S E3, E4
                E DOERING T/AU
             50 S E3-E5, E8-E11
L52
L53 •
              1 S E20
                E SANDHOFF K/AU
L54
            311 S E3, E5, E6
                E SAENDHOFF K/AU
                E SANDHOEFF K/AU
                E MAXT H/AU
L55
              1 S E4
L56
              3 S L44 AND L45-L55
                E TEA PRODUCT/CT
                E E4+ALL
L57
           7553 S E3+NT
          10551 S L28-L33, L57
L58
          20800 S TEA OR GREENTEA OR BLACKTEA OR (GREEN OR BLACK) (L) TEA OR THEA
L59
L60
           2019 S L44 AND L57-L59
             73 S L60 AND COSMETIC#/SC, SX, CW
L61
                E SKIN/CT
                E E3+ALL
L62
          66138 S E4+NT
                E E40+ALL
L63
            669 S E4+NT
                E E9+ALL
           5840 S E3, E2+NT
L64
                E E11+ALL
           2455 S E4, E3+NT
L65
                E E8+ALL
                E E12+ALL
L66
           1774 S E3+NT
                E E6+ALL
           5424 S E3+NT
L67
                E E11+ALL
L68
          55397 S E2,E1,E5-E50,E57
                E SKIN, DISEASE/CT
                E E3+ALL
L69
          37473 S E4, E3+NT
                E E75+ALL
             83 S E4+NT
L70
            239 S L44 AND L62-L70
L71
             95 S L60 AND L71
L72
L73
            615 S L60 AND (PHARMACEUT? OR PHARMACOL? OR DRUG?)/SC,SX,CW
L74
            62 S L61, L72 AND L73
            120 S L61, L72, L74
L75
L76
             3 S L56 AND L75
             87 S L75 AND (PY<=1998 OR PRY<=1998 OR AY<=1998)
L77
L78
             35 S L77 AND COSMETIC#/SC
L79
             10 S L77 AND (CREAM OR LOTION OR SALVE OR OINTMENT OR LINIMENT OR
L80
              5 S L77 AND ?EMULS?
             12 S L79, L80
L81
             13 S L76, L81
L82
              8 S L82 AND L42
L83
              7 S L83 NOT FOODS/TI
L84
L85
              5 S L82 NOT L83
L86
              7 S L84 NOT MANITA/TI
L87
             26 S L78 NOT L76, L79-L86
                SEL AN DN 3 8 15 18 21
L88
              5 S E1-E15 AND L87
L89
             49 S L77 NOT L78-L88
                SEL AN DN 6 14 25 40 43 48 49
              7 S E16-E36 AND L89
L90
             19 S L76, L84, L86, L88, L90
L91
                SEL HIT RN
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FILE 'REGISTRY' ENTERED AT 12:23:34 ON 01 OCT 2001

17 S E37-E53

L92

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FILE 'REGISTRY' ENTERED AT 12:27:28 ON 01 OCT 2001
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•FILE 'HCAPLUS' ENTERED AT 12:28:34 ON 01 OCT 2001

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FILE 'WPIX' ENTERED AT 12:28:53 ON 01 OCT 2001
L93
            639 S L43
                 E CATECHIN/DCN
                 E E3+ALL
L94
            242 S E2
                 E GALLOCATECHIN/DCN
                 E E4+ALL
             97 S E2
L95
             24 S E4
L96
                E EPICATECHIN/DCN
                E EPICATECHIN/DCN
                 E E3+ALL
L97
             91 S E2
L98
             70 S E4
                E EPICATECHIN/DCN
                 E E7+ALL
             97 S E2
L99
L100
             53 S E4
            749 S L93-L100
L101
                E SCHREINER V/AU
             29 S E3
L102
                E SCHONROCK U/AU
L103
               4 S E3
                 E SCHOENROCK U/AU
L104
             50 S E3
                 E STAB F/AU
L105
               4 S E3
                 E STAEB F/AU
L106
             36 S E3
                E MAX H/AU
             27 S E3
L107
                E MAXT H/AU
L108
               1 S E3
                E DORING T/AU
              3 S E3, E4
L109
                E DOERING T/AU
               8 S E3-E5
L110
                E SANDHOFF K/AU
L111
               6 S E3
L112
              3 S L101 AND L102-L111
             50 S A61K007-48/IC, ICM, ICS AND L101
L113
              2 S A61K007-48/ICA, ICI AND L101
L114
            111 S L101 AND (B14-N14? OR C14-N17? OR B12-A07 OR C12-A07 OR D08-B
L115
             62 S L101 AND (B14-R01 OR C14-R01 OR B12-L03 OR C12-L03 OR A12-V04
L116
L117
          41892 S (P943 OR Q262 OR Q254)/MO,M1,M2,M3,M4,M5,M6
            120 S L117 AND L101
L118
            165 S L113-L116, L118
L119
L120
             48 S L119 AND A61K035-78/IC, ICM, ICS
L121
               9 S L119 AND A61K035-78/ICA, ICI
             53 S L120, L121
L122
             25 S L59 AND L122
L123
             60 S L119 AND A61K007/ICM
L124
             56 S L124 NOT A61K007-16/IC, ICM, ICS
L125
L126
             34 S L125 AND SKIN/TI
             22 S L125 NOT L126
L127
L128
              2 S L119 AND DRY SKIN
               8 S L119 AND MOISTUR?
L129
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FILE 'WPIX' ENTERED AT 12:46:36 ON 01 OCT 2001